

## Cell-specific retroviral vectors with antibody domains suitable for cell-specific transduction of selected mammal cell types

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### Abstract of DE19752854

Cell-specific retroviral vectors with antibody domains suitable for cell-specific transduction of selected mammal cell types, are new. A method to produce cell-specific retroviral vectors, consists essentially of the following steps: (a) immunization of a mammal with one or more cell populations; (b) isolation of RNA from the immunized mammal, especially the B cell RNA; (c) production of a cDNA strand of the variable region of the heavy and light chains of the immunoglobulins isolated from the RNA by RT-PCR with primers for the respective immunoglobulin chains, where the primer nucleic acid sequences are essentially for an oligopeptide linker; (d) ligation of the cDNA strand to scFv-cDNA; (e) ligation of the scFv cDNA in a phagemid vector and transformation of a host bacterium with the vector; (f) isolation of phage, by selection of phage that bind to the cell population used in step (a); (g) cleavage of the scFv coding DNA fragments from the cell-specific phage and ligation into a psi-negative retroviral Env-expression vector; (h) transformation of a Env-ScFv expression vector to be maintain in a packaging cell; and (i) isolation of a packaging cell with the retroviral vectors. Independent claims are also included for the following: (1) a retroviral vector, produced by a method as above; and (2) a retroviral packaging cell for housing retroviral vectors as above.

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